

REMARKS

Applicant thanks Examiner for the detailed review of the application. Applicant has amended claims 1, cancelled claim 2, and newly added claims 14-20.

Examiner currently rejects applicant's claims 1-6, and 10 as being unpatentable over Bordaz et al. (U.S. Patent 6,195,728), herein referred to as Bordaz, in view of Alpert et al (U.S. Patent 5,559,986) under 35 U.S.C. 103(a). Applicant's claim 1 discloses, "an integrated circuit including one or more processor cores ... an on-chip shared cache; and a ring to connect the one or more processors and the shared cache." In contrast, Bordaz at col. 3 line 55 – col. 4 lines 3 discloses the following

FIG. 1 shows an example of machine architecture with nonuniform memory access, made up of four modules 10, 20, 40 and 60, which are interconnected by means of a ring 16. The following description of FIG. 1 is valid for any arbitrary number of modules greater than or equal to two.

Here, Bordaz discloses use of a ring to connect modules in a "machine architecture", which is explicitly different from an integrated circuit including a ring connecting one-or-more processor cores and the shared cache. Examiner cites Bordaz's memory element 5 as equivalent to applicant's shared memory. However, Bordaz's memory 5 is not connected in a ring with one or more processors, but rather is coupled to processor 1-4 by a conventional multi-drop bus, as illustrated in Figure 1. Additionally, Bordaz's memory 5, 25, 45, and 65 are included in modules 10, 20, 30, and 40 not coupled with modules 10, 20, 30, and 40 in a ring.

Moreover, Alpert merely discloses an interleaved cache memory, not a shared cache and one or more processor cores to be connected by a ring. As a result, applicant respectfully requests that claim 1 and its dependent claims 3-13 are now in condition for allowance for the reasons stated above.

Newly added independent claims 14 and 18 include a similar limitation of a plurality of cores and a shared memory connected in a ring or coupled together with a ring interconnect. As stated above, Bordaz and Alpert do not teach a shared memory connected in or coupled together with a ring. As a result, applicant respectfully requests that newly added claims 14 and 18, as well as their depended claims 15-17 and 19-20 are also in condition for allowance.

If there are any additional charges, please charge Deposit Account No. 50-0221. If a telephone interview would in any way expedite the prosecution of the present application, the Examiner is invited to contact David P. McAbee at (503) 712-4988.

Respectfully submitted,
Intel Corporation

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/s/David P. McAbee/Reg. No. 58,104/
David P. McAbee
Reg. No. 58,104

Intel Corporation
M/S JF3-147
2111 NE 25th Avenue
Hillsboro, OR 97124
Tele – 503-712-4988
Fax – 503-264-1729